TOBACCO INDUSTRY RESEARCH COMMITTEE 6. Budget Plan

Expendance Surgiden

Application For Research Grant Dung- and

\$5. PPO. CO Total March 17, 1955

7. Name of Investigator: R. H. Rigdon, M. D.

experiment prove satisfactory.

2. Title has and book and the Professor of Pathology and Director of the Laboratory of Experimental Pathology ranges to carry on this problem.

5. Detailed Plan of Procedure (Use reverse side if additional space is needed):

3. Institution

& Address:

Medical Branch - University of Texas - Galveston.

NEW YORK 1, N. Y.

4. Project or Subject:

Study the effect of methylcholanthrene on the tissues of the duck. Top compare the effect of methylcholanthrene on different tissue with emphasis on the reaction in the trachea when compared with the skin of the body and the web of the foot.

bour appearant for the past 3 years by the U.S. Public Assich Gardies. coming I have been studying this problem for 4 years now and have worked out the details A bor publications have been made on these results. We have a study about completed on the relation of trauma to the development of tumors in the skin following the local hemand the relation of trauma to the development of tumors in the skin following the local chicken application of methylcholanthrene; trauma was produced by plucking the feathers. decompare have already obtained the tracheas from 50 normal ducks for controls in the study of the effect of methylcholanthrene on the trachea. Methylcholanthrene crystals have dempare been put into the tracheas of 10 ducks, some of which have been observed now for the books of months and apparently no tumors are present. These ducks will be sacrificed later for histologic study. More methylcholanthrene can be put into the trachea in mineral oil and will cover a large area of the surface. Already I have been able to put 0.5 ml. of mineral oil down into the trachea without serious complications.

One of a group of 10 ducks developed lipoid pneumonia. I believe this technique

will prove satisfactory for the study of methylcholanthrene in the trachea. Other

carcinogens may be studied in the duck for their effect on the trachea should this

Director of Project

6. Budget Plan: for one year

Expendable Supplies Asu & Permanent Equipment Överhead

1.200.00 250.00 490.00 250,00 \$5,390,00 Total 1.42

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7. Anticipated Duration of Work:

R. H. Two years D.

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8. Facilities and Staff Available:

Professilaboratory of Experimental Pethology Laboratory of ExpaniaPresentastaff adequate to carry on this problem.

& Addmis

lighter Eranch - University of Years - University Texas

d. Freject or Subject

9. Additional Requirements: Dividy the affect of nerbylabolanthious on the flower of the disch. Inc. disches the the trucker when dominared with the tolds of the body and the trop of the foot.

10. Additional information (including relation of work to other projects and other sources of supply): been supported for the past 3 years by the U.S. Public Health Service. The project for the coming year (June 1, 1955) was approved but no funds are available. Because of this fact, other financial assistance is needed.

A basic study of the reaction of duck tissue to carcinogens will be of value in any study

of neoplasms. The following tumors have already been produced in the ducks: papillomas, hemangiomas, squamous cell carcinomas, lipomas and a variety of neurogenic tumors. In the chicken we have produced many squamous cell carcinomas and one hemangioma. accompanying these tumors in the chicken are now under study was a few attory

With a basic knowledge of the reaction of duck tissue to methylcholanthrene, we can then Compare the reaction of the duck tissues to other carcinogens, such as those alleged to be in tobacco. This is especially true fra referable to the respiratory tract. We may also see how far one is justified in predicting that since a carcinogen produced a cancer in one type of tissue it can be assumed that a similar lesion will occur in an unrelated type of tissue.

The University supports our study with money for some personnel and a limited amount of supplies and maintenance. It is necessary to supplement these funds with outside grants in order to carry out the project indicated on the preceding pages. in the traches, Other paroimogens may be exudied in the suck for their effect on the traches should this experiment preve extisfactory.

> /s/R. H. Rigdon Signature_ Director of Project

> > Appleman

Business Officer of the Institution